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Correlation between Cultural Competence and Accountability in Nurses Working in Hospitals in Hamadan

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Abstract

Introduction: The ability to care for patients with the knowledge about their cultural needs is an essential part of communication skills of nurses. Cultural competence along with responsibility not only can meet the needs of hospitals, but also improve the well-being of patients and increase their satisfaction. The objective of this research was to evaluate the association between cultural competence and responsibility in nurses working in hospitals of Hamadan**.** Methodology: This descriptive cross-sectional research is a correlation study which carried out on 300 nurses working in hospitals affiliated to Hamadan University of Medical Sciences in 2017. The collected data in this research included demographic characteristics, employment history of nurses, responsibility level, and cultural competence of nurses. Responsibility was assessed by using the Mergler questionnaire and cultural competence was assessed by using the Molder questionnaire. The relationship between these variables and other variables were analyzed.Results: The mean score of responsibility in the nurses was found 89.3 ± 13.6 and the mean score of their cultural competence was found 196.6 ± 26.5. The cultural competence was high in 160 (53.3%) of them, moderate in 135 nurses (45%) and low in 5 (1.7%) of them. No significant correlation was found between cultural competence score and responsibility score (P-value = 0.069, r = 0.105). In addition, age, gender, education, marital status and employment history of nurses showed no significant relationship with their cultural competence (P-values <0.05).Conclusion: The level of cultural competence in the majority of nurses was moderate and high, but the level of cultural competence did not have a significant relationship with their responsibility. Given the importance of the subject of study, conducting more studies is required to clarify the relationship between these two variables.

Keywords: Cultural Competence, Responsibility, Nursing Care, Iran

Introduction

Culture is a set of special features, characterized by language, religion, food, social habits, art and music (Rezayyian, 1998). In Iran, as other countries, due to the growth of the phenomenon of migration from villages to cities and from smaller cities to metropolitan cities, people with diverse cultures are living with their unique values. These values are manifested in culture of community and affect all social behaviors of individuals and determine their orientation (Mosadegh & Yarmohammadian, 2006). This diversity of culture is also seen among patients. It is one of the important issues which nurses face them nowadays. Nurses in clinical environment are dealing with different patients with various cultural backgrounds, and their professional life has been interwoven with the lives of patients receiving the services (Mehdipour & Abtahi, 2010). Thus, effective nursing care occurs when the nurse understands the patient's cultural values and pays attention to cultural differences. Hence, nurses are needed to acquire the necessary knowledge and skills with regard to culture and

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cultural competence in order to establish this relationship (Mirkamali & Narenji, 2008). The ability to understand the values, attitudes, beliefs, traditions and customs of patients in diverse cultures and ethnicities is called cultural competence (Tzeng, 2004) which leads to patient satisfaction and positive outcomes in care and promotion of health (Roodaki, 2008). Cultural competence is vital, especially in nursing, since nurses spend much time to provide care for patients directly than other health care professionals (Arnold et al., 2001). Nurses who are culturally competent are sensitive to cultural differences and their care is based on these differences. They also try to challenge marginalization and discrimination (Meleis, 1996).

Hence, nurses should be able to communicate effectively with patients with diverse cultures in order to be aware of the needs of their patients and to understand which nursing measures are proper for the patient and how these measures should be changed, if necessary, in order to improve the patient's health (Salam Zadeh et al., 2008). Responsibility refers to a set of activities performed voluntarily by organizations and their employees, as an effective and useful member of the community (Redman & Fry, 2000; Sprung et al., 2007). Responsibility is a continuous commitment to behave in a moral way to improve the quality people's lives, their families and the community at a larger scale (Bell & Breslin, 2008). In interpersonal communication, or in communication between the person and organization, responsibility implies accountability. In this regard, the importance and role of responsibility in the area of treatment, because of its specific nature, is undeniable. The health sector tries to provide the modern and up-to-date health services to community through interaction with various specialties, sectors, industries and facilities (Bahrami et al., 2012).

Meanwhile, nurses are also responsible to make their bests to provide desirable and high-quality care appropriately and without discrimination and judgment to all clients. (Alon & Higgins, 2005). In addition, given the increased knowledge of people with the Patients' Rights Charter, if the hospitals and nurses cannot fulfill their duties with high responsibility, it would result in patient dissatisfaction and their complaints (Earley & Ang, 2003). As nurses in hospitals of different cities face with diverse cultural backgrounds and limited studies have been conducted in Iran on the correlation between cultural competence and responsibility and different results have been reported in these studies, this research was conducted to evaluate the correlation between cultural competence and responsibility in nurses working in hospitals affiliated to Hamadan University of Medical Sciences in 2017.

Methodology

The current research was a correlational type of descriptive- cross-sectional study, conducted on 300 nurses working in hospitals affiliated to Hamadan University of Medical Sciences in 2017. In this research, the research inclusion criteria included working in one of the university hospitals for at least 6 months, having a bachelor degree and higher in nursing, and willingness to participate in the study. The protocol of the present study was examined by the Ethics Committee of Hamadan University of Medical Sciences and confirmed and registered with No The data collection tools included a demographic information checklist and two questionnaires, including Moulder cultural competence questionnaire and Mergler responsibility questionnaire. Demographic data included age, gender, level of education (bachelor and master), marital status (single, married, divorced, widow), and employment history (per year). The Moulder's Cultural Competence Questionnaire was approved by Bastami et al with the Cronbach's alpha coefficient of 0.86 (Bastami et al., 2016). It consists of 51 questions scored in a 5-point Likert scale, in which score 1 means strongly disagree and score 5 means strongly agree. The questionnaire evaluates the cultural competence of nurses in 4 subgroups including the knowledge of cultural care, the attitude towards cultural care, cultural competence and preparation for cultural care. The general score of the questionnaire is between 51 and 255. In total, score 51 to 109 represents low cultural competence, score 110 to 167 represents moderate cultural competence and score 168 to 255 represents high cultural competence. The reliability of the questionnaire was calculated 0.94 using Cronbach's alpha coefficient in the present study. The Mergler Responsibility Questionnaire was translated into Persian language by Khani et al in 2016, and its reliability was confirmed by the Cronbach's Alpha coefficient of 0.88 (Khani, 2017). It includes 26 questions including questions assessing the responsibility of nurses.

The questions are scored on five-point Likert scale, in which option 1 means strongly disagree, option 2 means disagree, option 3 mean no idea, option 4 means agree, and option 5 means strongly agree. In this questionnaire, the general attitude of nurses' responsibility is evaluated. The score of this questionnaire is between 26 and 130, and higher score suggests higher responsibility of people. The reliability of the questionnaire was obtained 0.83 using Cronbach's alpha coefficient. The proportional classified random method of sampling was used in this study. At first, the total number of nurses in the hospitals covered by the university was obtained, and based on the required sample size; the share of each hospital was calculated. Then, the samples were randomly selected from the list of nurses. After that they met the inclusion criteria of research and announced their willingness to participate in the study, the research questionnaires were provided for them after explaining the research objectives.

In order to enhance the responsibility of the samples, questionnaires were provided to the nurses in the hospital wards and they were asked to complete the questionnaires carefully in their leisure time and deliver them. The researcher also attended at the place where questionnaires were completed in order to answer the nurses' questions, and collected them. Statistical analysis was performed using SPSS 24 software. Descriptive results were reported as mean ± standard deviation or frequency (percentages) in terms of type of variable. To compare the level of cultural competence quantitative variables, one-way ANOVA was used, and to compare it with qualitative variables,

chi-square test was used. The correlation between cultural competence and responsibility score and other variables was calculated using Pearson correlation coefficient. Moreover, to evaluate the relationship between cultural competence and responsibility score, linear regression was used. The significance level was considered to be less than 0.05 in all cases.

Results

Table 1 shows the demographic characteristics of the research subjects. The mean age of the subjects was 31.4 years. The youngest and the oldest of them were 22 and 51 years of old, respectively, and 67.7% of nurses were female while 32.3% were male. Most nurses had a bachelor level of education (90.3%) and the rest of them (9.7%) had master. The majority of these nurses (63.3%) were married and their mean employment history was 7.2 years. The mean score of responsibility in nurses was 89.3 with a standard deviation of 13.6. The mean score of the nurses'' cultural competence was 196.6 with a standard deviation of 26.5. In addition, the cultural competence level was high in 160 (53.3%) of them, moderate in 135 (45%) of them, and low in 5 (1.7%) of them.

Table 2 shows the results of comparing variables based on the level of cultural competence of nurses. The level of cultural competence of nurses was not significantly correlated with age and gender (P-value <0.05). There was no significant correlation between level of education, marital status, employment history and their cultural competence level (P-value <0.05). Moreover, the mean score of responsibility was similar in nurses with low, moderate and high cultural competence and there was no significant difference in this regard (P-value = 0.913).

The relationship between responsibility score and gender, education, and marital status in the nurses are presented in Table 3. The mean score of responsibility in male and female nurses did not show significant difference (P-value = 0.673). The mean score of responsibility of nurses with master degree was 94, which was significantly higher than that (88.8) of nurses with bachelor degree (p-value = 0.049). The level of cultural competence of the staff was not significantly associated with age and gender (P-value <0.05). In addition, the responsibility scores of married, single, widow nurses were similar (P-value = 0.082). With regard to the relationship of cultural competence of nurses with their responsibility, age and employment history, the results showed a direct and weak correlation between the cultural competence of nurses and their responsibility, which is not statistically significant (P-value = 0.069, r=0105).

In addition, there was no significant relationship between nurses' cultural competence scores and their age and employment history (P-value <0.05). With regard to the relationship between the responsibility score and the age and employment history of nurses, the results showed a direct and significant relationship between the score of responsibility and age, so that with an increase in the age of nurses, their level of responsibility increased (P-value = 0.022, r=0.132). However, there was not a significant relationship between the responsibility score and the employment history (Table 4).

Table 5 presents the results of simple and multiple linear regression analysis with regard to the predictive variables of cultural competence in the nurses. Simple linear regression results show that marital status is the only predictor affecting the cultural competence of the nurses. Additionally, the results of multiple linear regression show that only nurses' age was a predictor affecting them on their cultural competence.

Table 1: Demographic characteristics of participants in the study

		mean	SD
Age (year)		31.4	6.1
Employment history		7.2	5.6
		f	%
gender	male	97	32.3
	female	203	67.7
education	bachelor	271	90.3
	master	29	9.7
Marital status	married	190	63.3
	Single	108	36
	Divorced/widow	2	0.7

Table 2: Comparison of demographic characteristics of participants in terms of cultural competence level

		cultural competence level			Significance level
		low (n=5)	moderate (n=135)	High (n=160)	
Age (year)		30.4 ± 5	31.3 ± 6.3	31.5 ± 5.9	0.919
gender	male	1 (20)	49 (36.3)	47 (29.4)	0.430
	female	4 (80)	86 (63.7)	113 (70.6)	

education	bachelor	1 (20)	12 (8.9)	16 (10)	0.767
	master	4 (80)	123 (91.1)	144 (90)	
Marital status	married	3 (60)	77 (57)	110 (68.8)	0.224
	Single	2 (40)	57 (42.3)	49 (30.6)	
	Divorced/widow	0	1 (0.7)	1 (0.6)	
Employment history		6.8 ± 5	7 ± 5.8	7.4 ± 5.5	0.859
Responsibility score		90.4 ± 16.7	89 ± 9.9	89.6 ± 16.1	0.913

Table 3: The relationship between responsibility score and gender, education, and marital status of the participants

		Responsibility score		
		mean	SD	Significance level
gender	male	88.8	10.9	0.673
	female	89.5	14.7	
education	bachelor	88.8	13.4	0.049
	master	94	15.1	
Marital status	married	90.6	13.9	0.082
	single	87	12.9	
	Divorced/ widow	93	4.2	

Table 4: Correlation between cultural competence, responsibility, age, and employment history in participants

	cultural competence		Responsibility	
	Pearson Correlation Coefficient	Significance level	Pearson Correlation Coefficient	Significance level
age	0.040	0.488	0.132	0.022
Employment history	0.035	0.544	0.068	0.237
Responsibility score	0.105	0.069	-	-

Table 5: results of linear regression in investigating the variables predicting cultural competence in participants

	Simple linear regression		Multiple linear regression	
	Regression coefficient (standard error)	Significance level	Regression coefficient (standard error)	Significance level
age	-0.140 (0.530)	0.793	0.584 (0.267)	0.029
Gender (male)	-3.050 (3.270)	0.352	-0.823 (1.661)	0.621
Employment history	0.039 (0.556)	0.944	-0.466 (0.281)	0.098
Education (master)	-1.416 (5.195)	0.785	4.863 (2.620)	0.065
Marital status (single)	-6.942 (3.514)	0.049	-2.018 (1.790)	0.261
Cultural competence	0.182 (0.115)	0.114	0.047 (0.030)	0.114

Discussion

The present study evaluated the correlation between cultural competence and the responsibility of nurses working in hospitals affiliated to Hamadan University of Medical Sciences and results show that the level of cultural competence in more than half of nurses (53.3%) is high and only 1.7% of them had a low level of cultural competence. Cultural competence of nurses showed direct and weak relationship with their responsibility, which was not statistically significant. There was no significant correlation between the cultural competence of

nurses and the variables studied, and only the nurses' age variable was suitable for predicting their competence status. In addition, the responsibility of the nurses showed significant relationship with their age and education, so that with increasing age, the responsibility of nurses increased and by increasing their education level, their responsibility also increased.

Previous studies on cultural competence of nurses have reported different results. In the study conducted by Kardong et al., the cultural competence level of the 300 nurses participating in the international conference in Canada was reported at the moderate level (Kardong-Edgren et al., 2005). In another study by Riley et al, 53 nursing students who were under investigation, showed moderate level of cultural competence. (Riley et al., 2012) In the research carried out by Bond et al, nurses in the western part of the US showed low level of knowledge about specific cultural groups. In the research carried out by Eldar et al., the knowledge level of Israeli nurses of the cultural competence was reported high (Eldar, 2013). In the study carried out by Bunjitpimol et al., the cultural competence level of nurses of Bangkok city private hospitals was reported at a weak to moderate level (Bunjitpimol et al., 2015). In the study conducted by Almutairi et al, the cultural competence level of most Canadian nurses was reported high (Almutairi et al.,2017). In the study conducted by Bastami et al in Ilam city, the cultural competence of majority of nurses working in hospitals in this city is reported moderate and weak (Bastami et al., 2016). In the present study, the level of cultural competence was reported high in most nurses, which was in line with the results of some studies and contrary to the results of most studies conducted in this regard. As seen, studies in different regions have reported different results.

These differences can be attributed to differences in the tools used in studies, cultural differences among different populations as well as differences among the nurses studied in these studies, so that differences in age, employment history, marital status and other characteristics of these nurses could affect their knowledge of cultural competence. A few studies have been conducted on the relationship between cultural competence of nurses and their responsibility. In the study conducted by Bunjitpimol et al., significant relationship was reported between nurses' cultural competence and their responsibility, and it was found that nurses with higher responsibility have strong cultural competence (Bunjitpimol et al., 2015).

In the present study, in contrast to results of Bunjitpimol et al., no significant correlation was found between cultural competence and nurses' responsibility, which can be attributed to the differences between the questionnaires used in the studies and the populations studied. In the research conducted by Bunjitpimol et al, nurses working in private hospitals in Bangkok were studied, while in the present study, nurses working in public hospitals were studied, which differences in working and management conditions in these hospitals can be the cause of differences in results. In a similar study conducted on nurses working in West Azerbaijan hospitals, no significant correlation was found between cultural competence and nurses' responsibility, as present study (Mahmoodi et al., 2017). Given the limited number of studies about the relationship between cultural competence and responsibility of nurses, the existence of differences in the results of these studies and the importance of the issue, conducting more studies is needed in this regard in order to clarify this relationship more.

The association between cultural competence in nurses and other variables has been evaluated in various studies. In some studies, the relationship between age of nurses and cultural competence has been assessed, while some other studies have investigated the relationship between nurses' education and cultural competence and some other studies have investigated the relationship between employment history of nurses and their cultural competence. In addition, some studies have reported that cultural competence in female nurses was more than that of male nurses (Kim , 2013; Hawala-Druy & Hill, 2012; Almutairi et al., 2017 ; Eldar, 2013; Bastami et al., 2016).

These results are in contrast to those of our study, which did not show significant association between cultural competence of nurses and the mentioned variables. The main cause of these differences can be attributed to age difference, employment history, and high number of female nurses compared to male nurses. The lower mean age of nurses in this study compared to other studies, and as result, less employment history of these individuals, can affect this difference in results, while in previous studies, the positive role of employment history in in improving the cultural competence has been proven. In general, the results of this research revealed that the level of cultural competence in half of the studied nurses was high and was moderate in the rest of them, but no significant relationship was found between cultural competence and responsibility of nurses. However, in order to clarify the relationship between cultural competence and responsibility of nurses more, further studies are needed in different populations and in different cultures. Considering the importance of improving the nursing power as the main caregivers of health, planning based on the results of studies to achieve desired solutions such as holding educational courses to gain knowledge on different cultures, can be effective in increasing the nurses' cultural competence, improving the quality of care and enhancing patient satisfaction.

References

Almutairi AF, Adlan AA, Nasim M. Perceptions of the critical cultural competence of registered nurses in Canada. BMC nursing. 2017;16(1):47.

Alon I, Higgins JM. Global leadership success through emotional and cultural intelligences. Business horizons. 2005;48(6):501-12.

Arnold JL, Dickinson G, Tsai M-C, Han D. A survey of emergency medicine in 36 countries. Canadian Journal of Emergency Medicine. 2001;3(2):109-18.

Bahrami MA, Asami M, Fatehpanah A, Dehghani Tafti A, Ahmadi Tehrani G. Moral intelligence status of the faculty members and staff of the Shahid Sadoughi University of Medical Sciences of Yazd. Iranian Journal of Medical Ethics and History of Medicine. 2012;5(6):81-95.

Bastami MR, Kianian T, Borji M, Amirkhani M, Saber S. Assessment of cultural competence among nurses. Medical Ethics Journal. 2016;10(36):65-72.

Bell J, Breslin JM. Healthcare provider moral distress as a leadership challenge. JONA'S healthcare law, ethics and regulation. 2008;10(4):94-7.

Bunjitpimol P, Somrongthong R, Kumar R. Factors affecting nursing cultural competency in private hospitals at Bangkok, Thailand. International Journal of Healthcare. 2015;2(1):5.

Earley PC, Ang S. Cultural intelligence: Individual interactions across cultures: Stanford University Press; 2003.

Eldar O. Cultural Competence among Hospital Nurses in Israel, Babeș-Bolyai university; 2013.

Hawala-Druy S, Hill MH. Interdisciplinary: Cultural competency and culturally congruent education for millennials in health professions. Nurse Educ Today 2012; 32(7): 772-778.

Kardong-Edgren S, Bond ML, Schlosser S, Cason C, Jones ME, Warr R, Strunk P. Cultural attitudes, knowledge, and skills of nursing faculty toward patients from four diverse cultures. Journal of Professional Nursing. 2005;21(3):175-82.

Khani L. [Nahshe ghabeliate farhanghi, masoliat paziry, avamele ejtemay va farhanghi bar negaresh nesbate be ahdaiy ozve]. [Dissertation]. (Dehaghan) Iran. Islamic Azad University; 2017. [in Persian]

Kim DH, Kim SE. Cultural competence and factors influencing cultural competence in nursing students. Jkpmhn 2013; 22(3): 159-168.

Mahmoodi A, Khani L, Ghaffari M. The Relationship of cultural competence and responsibility with Nurses Attitude toward Patient's Right: The mediating Role of Ethical Beliefs. Iranian Journal of Medical Ethics and History of Medicine. 2017;9(5):39-51.

Mehdipour S. Abtahi A. Methods development of the hospital organization chart: Jafari publication; 2010.

Meleis AI. Culturally competent scholarship: Substance and rigor. Advances in nursing science. 1996;19(2):1-16.

Mirkamali SM, Narenji Sani F. A study on the relationship between the quality of work life and job satisfaction among the faculty members of the university of Tehran and Sharif University of technology. Quarterly journal of Research and planning in higher Education. 2008;14(2):71-101.

Mosadegh Rad A, Yarmohammadian H. A study of relationship between managers' leadership style and employees' job satisfaction. Leadership in Health Services. 2006;19(2):11.28-

Redman BK, Fry ST. Nurses' ethical conflicts: what is really known about them? Nursing Ethics. 2000;7(4):360-6.

Rezayyian. R. Management principles. Iran: Iransamt publication 1998.

Riley D, Smyer T, York N. Cultural competence of practicing nurses entering an RN-BSN program. Nursing education perspectives. 2012;33(6):381-5.

Roodaki M. Dynamic analysis of the quality of work life. MSc thesis in system management and productivity, . South Tehran Branch: Islamic Azad University; 2008.

Salam Zadeh Y, Mansoori H, Farid D. Study of the relation between quality of work life and productivity of human resources in health care institutes-a case study among nurses in Shahid Sadughi Hospital in Yazd. Journal of Urmia Nursing and Midwifery Faculty. 2008;6(2):60-70.

Sprung CL, Carmel S, Sjokvist P, Baras M, Cohen SL, Maia P, et al. Attitudes of European physicians, nurses, patients, and families regarding end-of-life decisions: the ETHICATT study. Intensive care medicine. 2007;33(1):104-10.

Tzeng H-M. Nurses' self-assessment of their nursing competencies, job demands and job performance in the Taiwan hospital system. International journal of nursing studies. 2004;41(5):487-96.